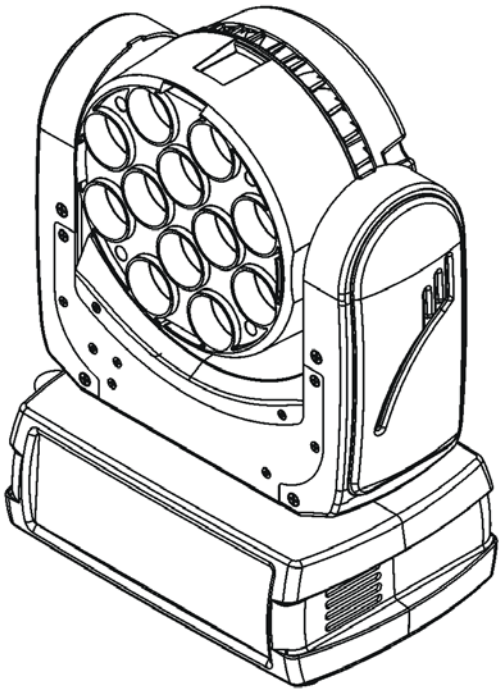
ROBIN® 100

LEDBeam (DayLight)

ROBIN® 100

LEDBeam (DayLight) Wireless DMX

CRMX ™



ROBE
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USER MANUAL

Version1.3

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Robin 100 LEDBeam (DayLight)

Robin 100 LEDBeam (DayLight) Wireless DMX

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FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE POWERING OR INSTALLING YOUR ROBIN 100 LEDBeam !

Save it for future reference.

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

The Robin 100 LEDBeam was designed for indoor use and it is intended for professional application only. It is not for household use.

1. Safety instructions

DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT!

Make sure that the available voltage is not higher than stated on the rear panel of the fixture.
This fixture should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized distributor or local power company.

Always disconnect the fixture from AC power before cleaning, removing or installing the fuses, or any part.

The power plug has to be accessible after installing the fixture. Do not overload wall outlets and extension cords as this canresult in fire or electric shock.

Do not allow anything to rest on the power cord. Do not locate this fixture where the cord may be damaged by persons walking on it.

Make sure that the power cord is never crimped or damaged by sharp edges. Check the fixture and the power cord from time to time.

Refer servicing to qualified service personnel.

This fixture falls under protection class I. Therefore this fixture has to be connected to a mains socket outlet with a protective earthing connection.

Do not connect this fixture to a dimmer pack.

LED light emission. Risk of eye injury. Do not look into the beam at a distance of less than 2 meters from the front surface of the product. Do not view the light output with optical instruments or any device that may conncentrate the beam

If the fixture has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

Do not shake the fixture. Avoid brute force when installing or operating the fixture.

This fixture was designed for indoor use only, do not expose this unit to rain or use near water.

When choosing the installation spot, please make sure that the fixture is not exposed to extreme heat, moisture

or dust.

Air vents and slots in the fixture´s head and base are provided for ventilation, to ensure reliable operation of the device and to protect it from overheating.

Do not block the LEDs array with any object when the fixture is under operation.

The openings should never be covered with cloth or other materials, and never must be blocked.

This fixture should not be placed in a built-in installation unless proper ventilation is provided.

Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.

Always use a secondary safety cable when mounting this fixture.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.

Do not block the front objective LEDs with any object when the fixture is under operation.

The fixture becomes very hot during operation. Allow the fixture to cool approximately 20 minutes prior to manipulate with it.

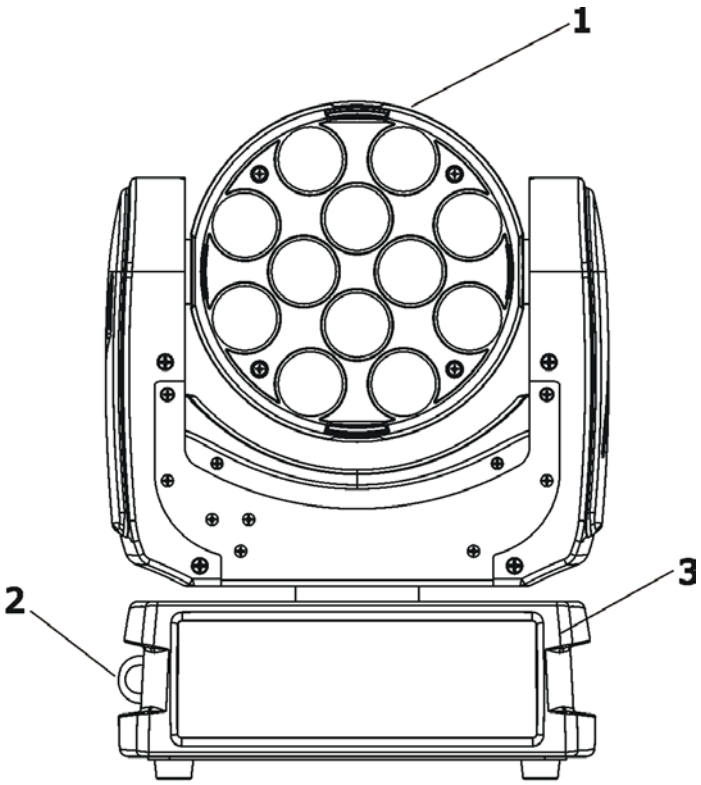
Operate the fixture only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the fixture. Most damages are the result of unprofessional operation!

Please use the original packaging if the fixture is to be transported.

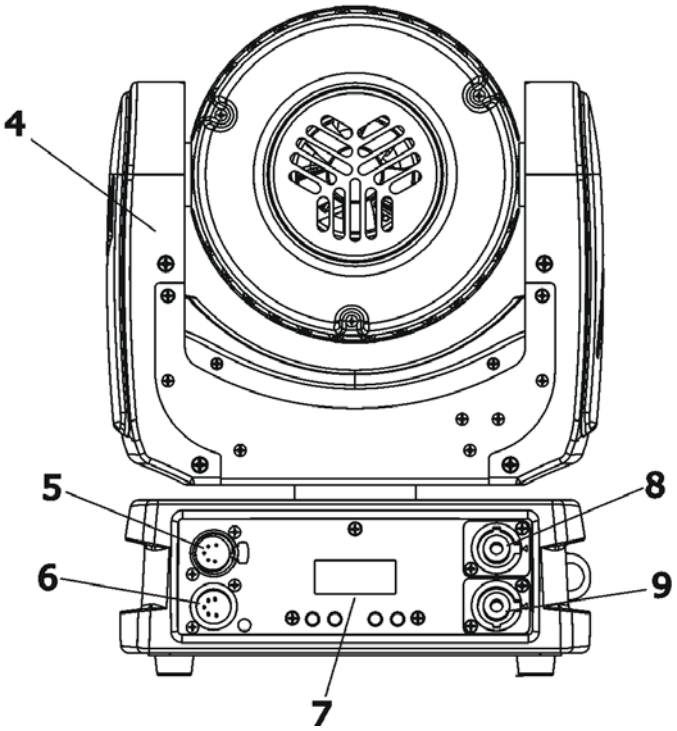
Please consider that unauthorized modifications on the fixture are forbidden due to safety reasons!

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, crash etc.

2. Fixture exterior view



1 - Moving head
2 - Attachment point for safety cable
3 - Base



4 - Yoke
5 - DMX out
6 - DMX in
7 - Control board
8 - Mains in
9 - Mains out

3. Installation

Fixtures must be installed by a Qualified electrician in accordance with all national and local electrical and construction codes and regulation.

3.1 Connection to the mains

For protection from electric shock, the fixture must be earthed!

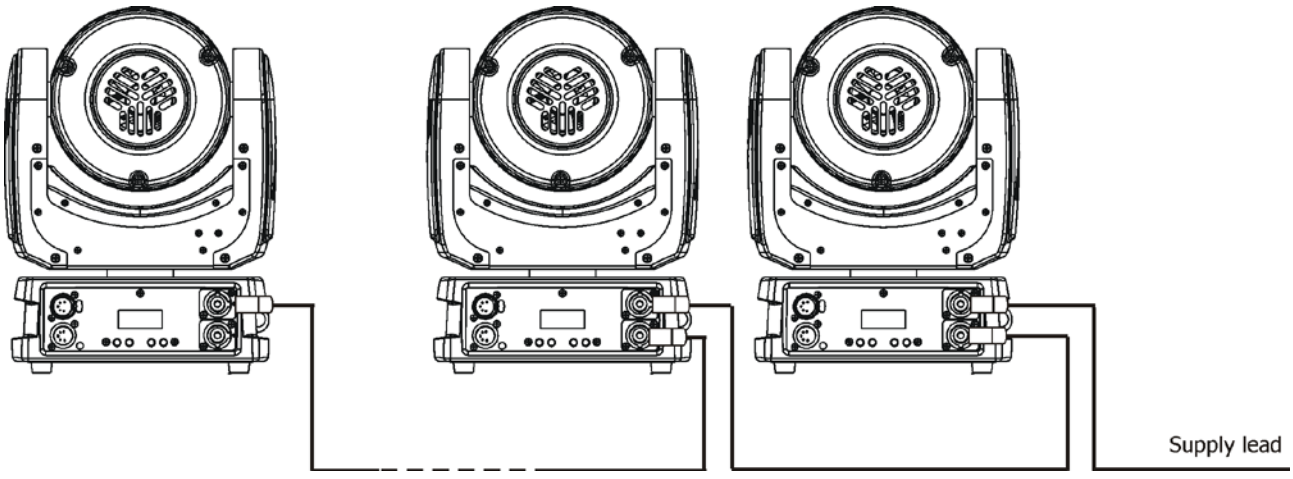
The Robin 100 LEDBeam is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 100-240 Volts.

If you need to install a suitable plug on the power cord, note that the cores in the power cord are coloured according to the following table. The earth has to be connected!
If you have any doubts about proper installation, consult a qualified electrician.

Core (EU)	Core (US)	Connection	Plug Terminal Marking
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⏚

This device falls under class one and must be earthed (grounded)!

Design of the Robin 100 LEDBeam allows to connect several fixtures to AC mains power in one interconnected daisy chain using power input and throughput connectors. Needed daisy chain cords are stated in the chapter "Technical specifications "
The max. number of connected fixtures depends on the AC mains power voltage:
12 fixtures at power supply= 230V
10 fixtures at power supply= 208V
6 fixtures at power supply= 120V
Do not overload the supply line and the connecting leads.



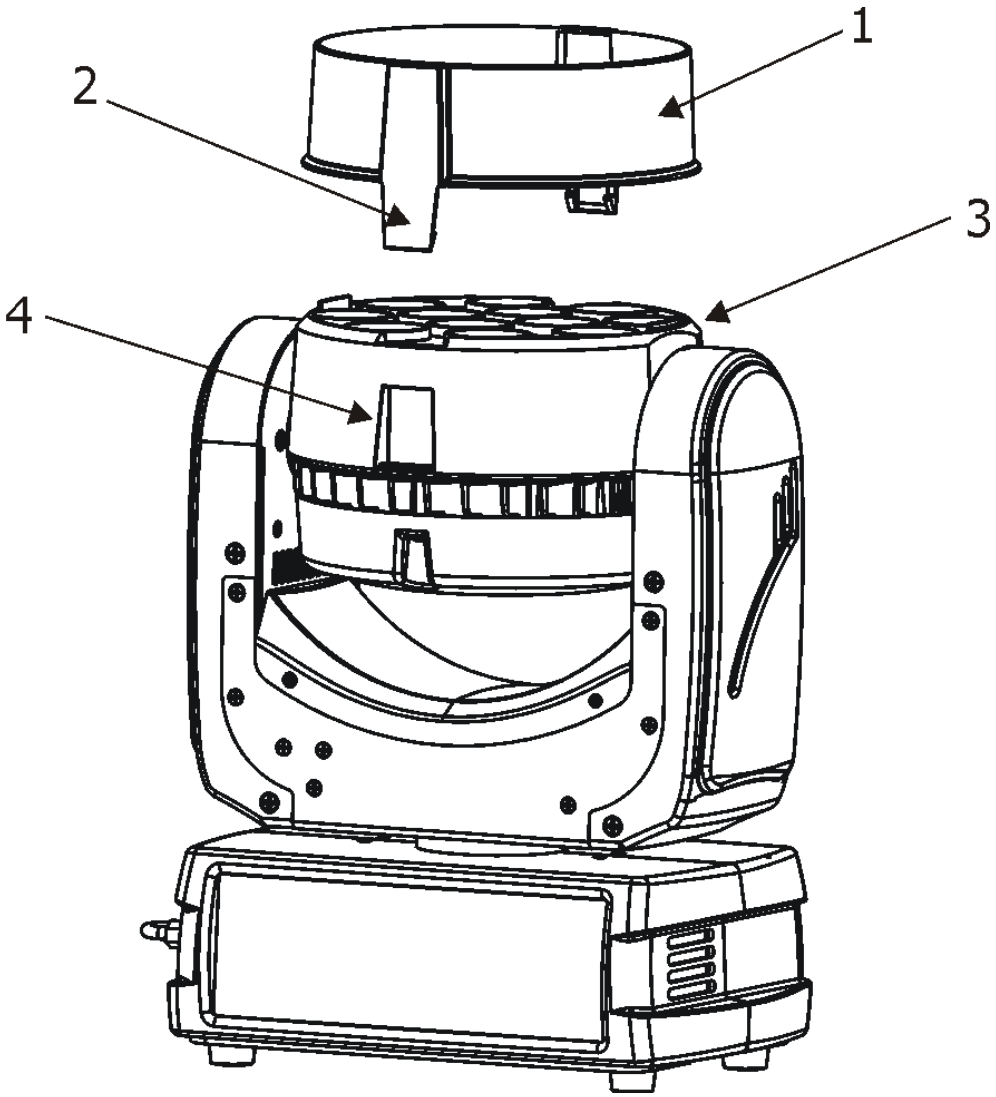
Wiring and connection work must be carried out by qualified staff!

3.2 Installing the top hat

Disconnect the fixture from mains before top hat installation

1. Go to the fixture menu and limit tilt movement (Pers --> Tilt Red--> On).

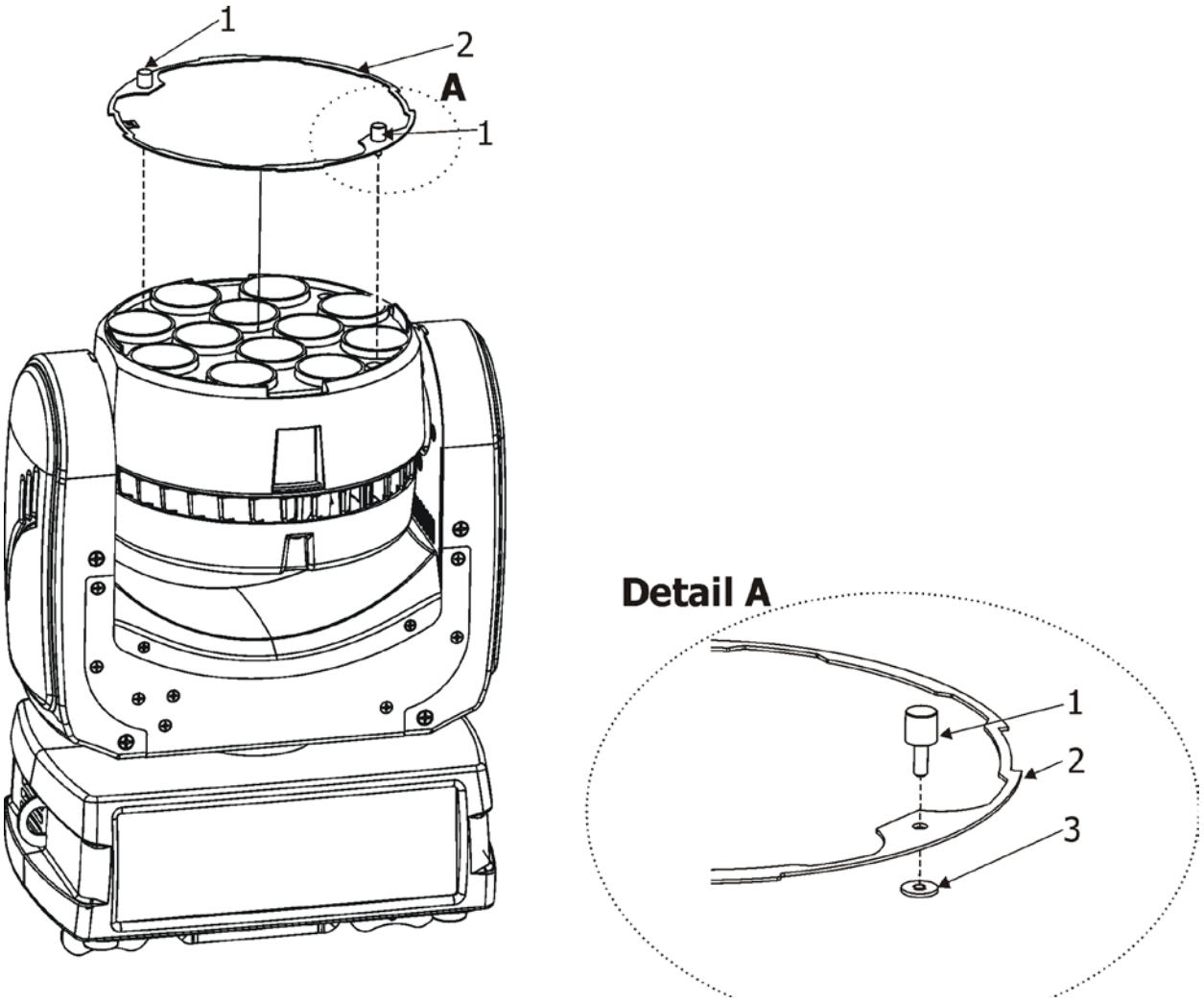
2.Put the top hat (1) on the head of the fixture (3) in such a way that both clips (2) of the top hat snap into cavities (4) in the head. Check that both clips are firmly egaged in the head cavities.



3.3 Installing the diffusion filter

Disconnect the fixture from mains before diffusion filter installation

1. Insert two screws (1) into holder with diffusion filter (2) and secure them with securing washers (3)



2. Screw the holder (3) to the head via two screws (1).

3.4 Rigging the fixture

The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.

When rigging, derigging or servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert after every four year in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

The fixture should be installed outside areas where persons may walk by or be seated.

IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury or damage to property.
The fixture has to be installed out of the reach of people.

If the fixture shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The fixture must never be fixed swinging freely in the room.

Caution: Fixture may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the moving head!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the fixture's weight.

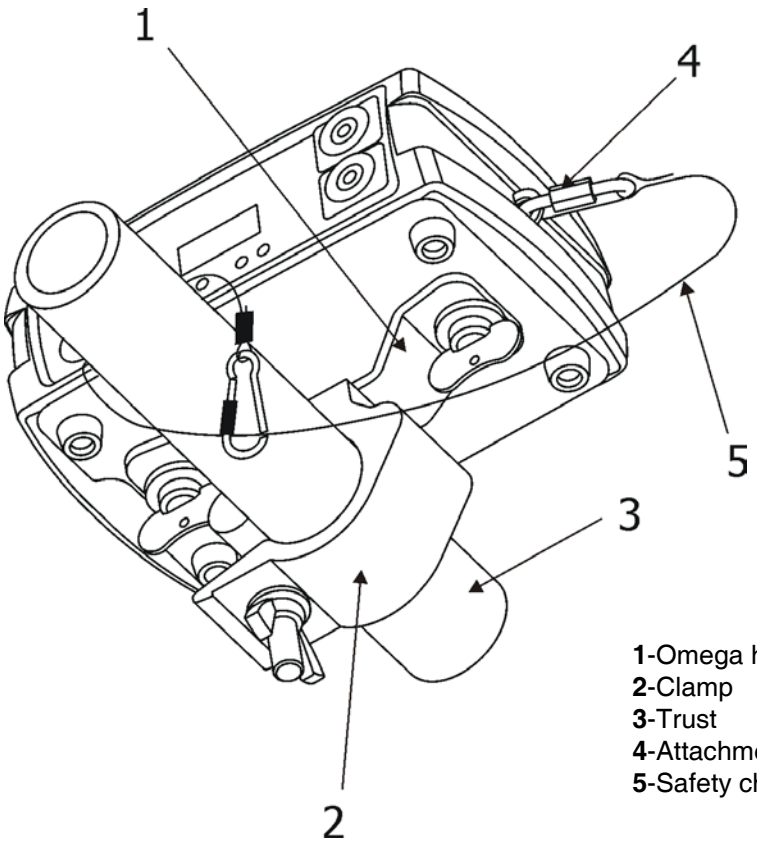
When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 0.4 m.

CAUTION!
Use an appropriate clamp to rig the fixture on the truss.
Follow the instructions mentioned at the bottom of the base.
Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the fixtures is secure.

The fixture can be placed directly on the stage floor or rigged on a truss without altering its operation characteristics .

For securing a fixture to the truss install a safety wire that can hold at least 10 times the weight of the fixture. Use only safety wire with screw-on carabine. **Fasten the safety cable in the attachment point and around the truss as shown on the picture below.**

Rigging via omega holder:



1-Omega holder
2-Clamp
3-Trust
4-Attachment point
5-Safety chain

When installing fixtures side-by-side, avoid illuminating one fixture with another!

3.5 DMX-512 connection

The fixture is equipped with 5-pin XLR sockets for DMX input and output. Only use a shielded twisted-pair cable designed for RS-485 and 5-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

DMX - output
XLRsocket:

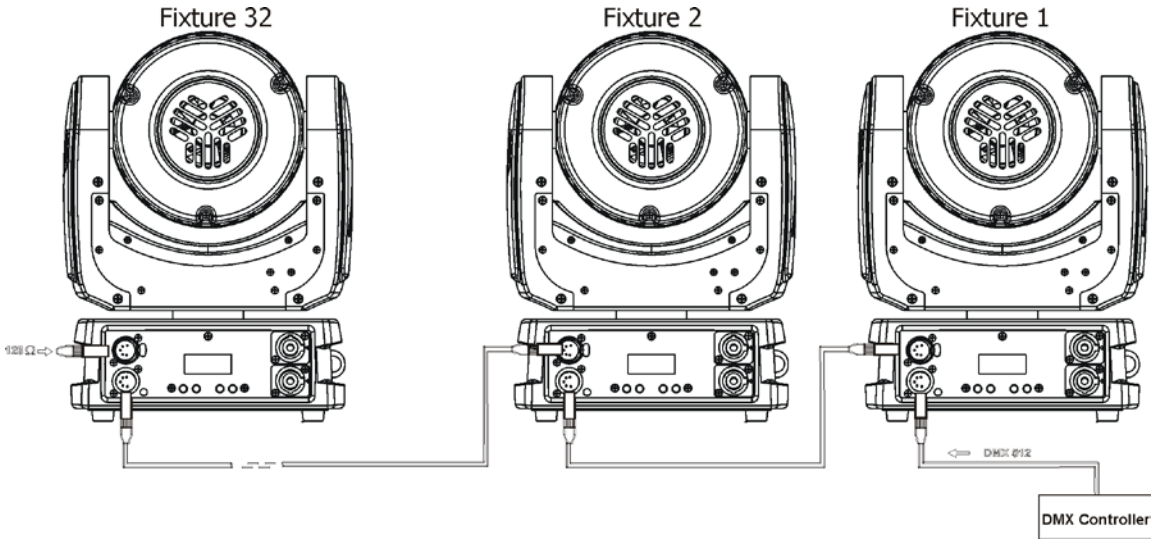
1 - Shield
2 - Signal (-)
3 - Signal (+)
4 - Used for wireless DMX
5 - Used for wireless DMX

DMX-input
XLR plug:

1 - Shield
2 - Signal (-)
3 - Signal (+)
4 - Used for wireless DMX
5 - Used for wireless DMX

If you are using the standard DMX controllers, you can connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

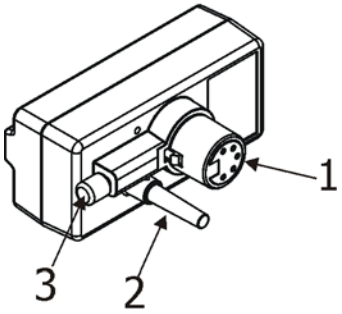
Building a serial DMX-chain:
Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. Up to 32 fixtures can be interconnected.
Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 Ω resistor between Signal (–) and Signal (+) into a 5-pin XLR-plug and plug it in the DMX-output of the last fixture.



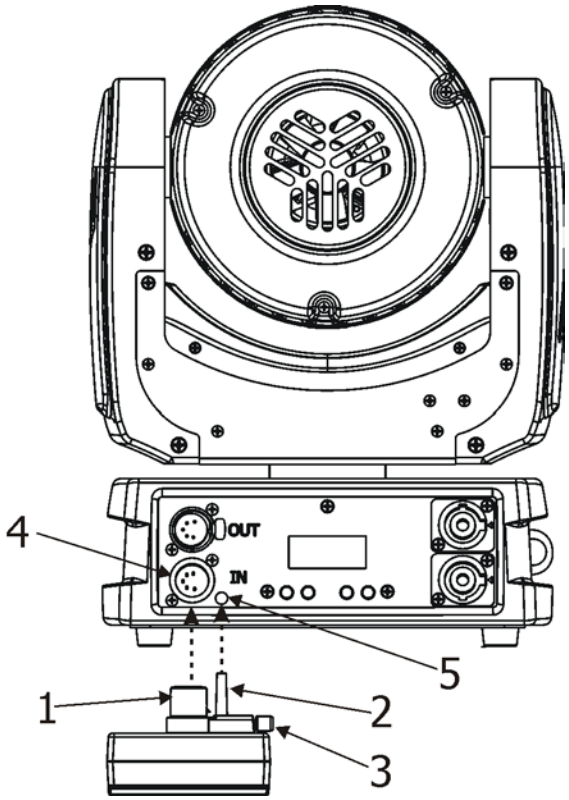
3.6. Wireless DMX operation

The external Robe Wireless CRMX-LB100 module allows receiving wireless DMX This device is equipped with the Lumen Radio CRMX module and antenna for receiving DMX signal. CRMX module operates on the 2.4 GHz band.

Robe Wireless CRMX-LB100



1 - 5-pin XLR (female)
2 - Locating pin
3 - Lock



Push in the 5-pin XLR plug (1) into 5-pin XLR sockit (4) and simultaneously locating pin (2) into hole (5) in the fixture. In this way the wireless DMX module is connected with the fixture.
NOTE: when you disconnect the DMX wireless module from fixture, press and hold lock (5) during getting the wireless module out.

To link the fixture with DMX transmitter.
The fixture can be only linked with the transmitter by running the link procedure at DMX transmitter .
After linking , the level of DMX signal (0-100 %) is displayed in the menu item “Stat“ (Special -->Vireless -->Stat).

To unlink the fixture from DMX transmitter.
The fixture can be unlinked from receiver via the menu item “ Unlink“ (Special-->Vireless -->Unlink.).

Note: Wireless DMX operation is implemented in the processor IC-1 (Info -->Sw Ver). Version of this processor has to be following:
IC-1 = 2.2 and higher for RGBW version
IC-1 = 1.2 and higher for SmartWhite and Day Light version.

4. Control menu map

Default settings=Bold print

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
DMXA	Set DMXA	001-255				
Info	POn Time	Total				
		Reset				
	DMX In	Pan	0-255			
		:				
		Dimm F	0-255			
	Temp	Current				
		Highest				
		High Res				
	Sw Ver	IC-1				
		IC-2				
		IC-3				
Pers						
	DMX Pres	**Mode 1**				
		:				
		Mode 6				
	Pan Rev	On, **Off**				
	Tilt Rev	On, **Off**				
	P/T Mode	**Speed**				
		Time				
	P/T Feed	**On**, Off				
	Tilt Red	**On**, Off				
	Display	Turn				
		On/Off T	On, **Off**			
		Contrast	0-100%			
		Backlight	0-100%			
	BLC DMC	On, **Off**				
	Act BLC	**P/T Mov**	On, **Off**			
	Mic Sens	0...**10**...19				
	Fans	**Auto**, High				
	Temp Uni	°**C**, °F				
	I Ef Pos	Pan				
		:				
		Dimm F				
		Store				
	Defaults					
Test Prg	Static	Pan	0-255			
		Tilt	0-255			
		Run				
	Dynamic					
Manual	Pres Eff	Pan	Pos 1-Pos 3			
		:				
		Dimmer	Pos 1- Pos 5			
	Manual	Pan	0-255			
		:				
		Dimm F	0-255			

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
Sta Alone	Music T	On, **Off**				
	Auti Run	**Off**				
		Test				
		Prog 1				
		Prog 2				
		Prog 3				
	Pr Play	Test Prg				
		Prog 1				
		Prog 2				
		Prog 3				
	Pr Edit	Prog 1	Step 1	Pan		
		Prog 2	:	:		
		Prog 3	Step 40	F.Tim	0-25.5	
				S.Tim	0-25.5	
				COPY		
				Prg End	1-40	
Reset						
Special	RDM Low					
	RDM Hight					
	Wireless	Stat				
		Unlink				
	Adjust	DMX Val	Pan	0-255		
			:			
			Dimm F	0-255		
		Calib	Pan C	0-255		
			Tilt C	0-255		
			Store			
	Sw Upd	On, **Off**				

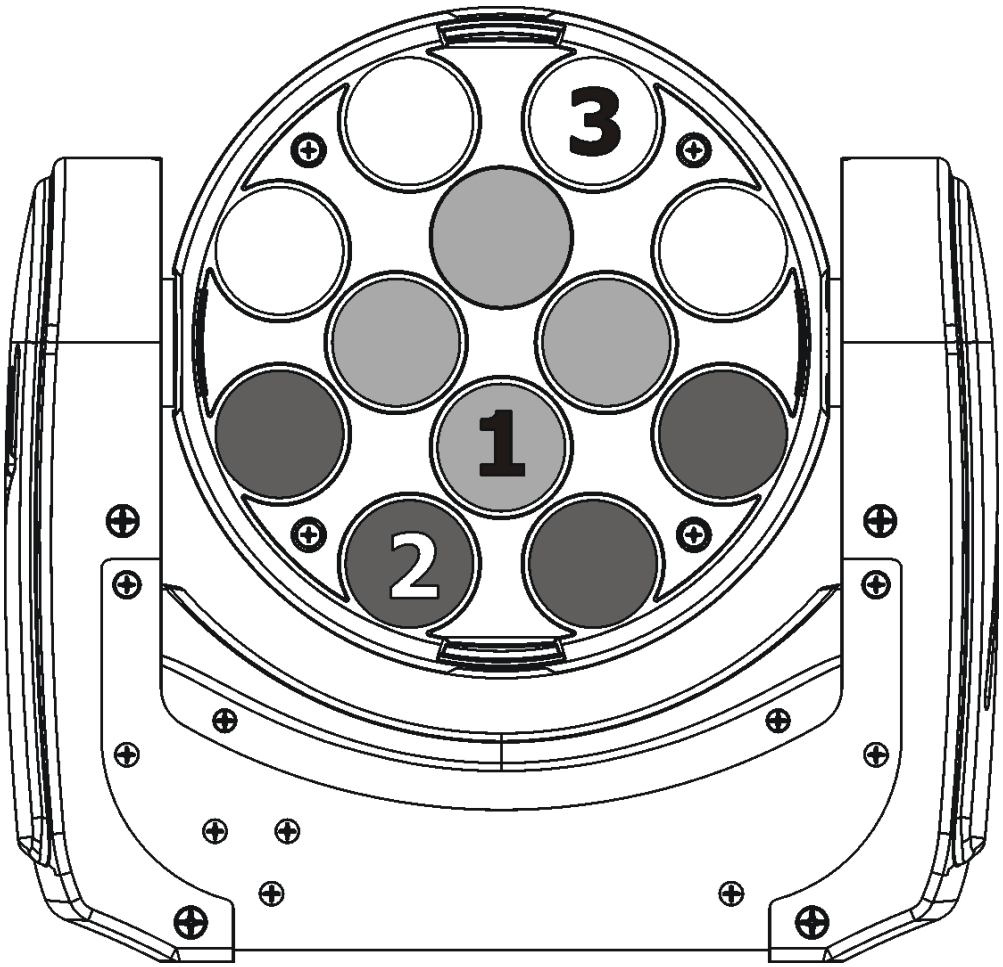
5.Robin 100 LEDBeam DayLight - DMX chart

Version 1.0

Mode/Channel						Value	Function	Type of control
1	2	3	4	5	6			
1	1	1	1	1	1	0-255	**Pan (8 bit)** Pan movement by 450°	proportional
2	2	2	2	2	2	0-255	**Pan Fine (16 bit)** Fine control of pan movement	proportional
3	3	3	3	3	3	0-255	**Tilt (8bit)** Tilt movement by 300°	proportional
4	4	4	4	4	4	0-255	**Tilt fine (16 bit)** Fine control of tilt movement	proportional
5	5	5	5	5	5	0 1 - 255 1 - 255	**Pan/Tilt speed, Pan/Tilt time** Max. speed (tracking mode) ***P./T. speed*-set Speed Mode in menu: P./T. Mode** Speed from max. to min. (vector mode) ***P./T. time* - set Time Mode in menu: Pan/Tilt Mode** Time from 0.1 s to 25.5 s.	step proportional proportional
6	6	6	6	6	6	0 - 9 10 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 119 120-124 125-129 130-139 140 - 149 150 - 199 200 - 209 210 - 255	**Special functions** Reserved *To activate following functions , stop in DMX value for at least 3sec. and shutter must be closed at least 3sec. (Shutter channel 16/10/12/9/9 must be at range of 0-31DMX). Corresponding menu items are temporily overrided.* Reserved Pan/Tilt speed mode Pan/Tilt time mode Blackout while pan/tilt moving Disabled blackout while pan/tilt moving Reserved Tilt movement reduction On Tilt movement reduction Off Reserved *To activate following reset function, stop in DMX value for at least 3 sec.* Pan/Tilt reset Reserved Total reset Reserved	 step step step step step step step step
7	-	7	-	11	7	0-255	**White (8 bit) - LED zone 1** Dimmer intensity from 0% to 100%	proportional
8	-	-	-	12	8	0-255	**White fine (16 bit) - LED zone 1** Fine dimming	proportional
9	-	8	-	13	9	0-255	**White (8 bit) - LED zone 2** Dimmer intensity from 0% to 100%	proportional
10	-	-	-	14	10	0-255	**White fine (16 bit) - LED zone 2** Fine dimming	proportional
11	-	9	-	15	11	0-255	**White (8 bit) - LED zone 3** Dimmer intensity from 0% to 100%	proportional
12	-	-	-	16	12	0-255	**White fine (16 bit) - LED zone 3** Fine dimming	proportional

Mode/Channel						Value	Function	Type of control
1	2	3	4	5	6			
							LED zone effects	
						0-7	No function	step
						8-15	All LEDs ON	step
							Speed of the following effects can be controlled by the Shutter/Strobe channel (DMX values of 96-127)	
						16-23	Effect 1	step
						24-31	Effect 2	step
						32-39	Effect 3	step
						40-47	Effect 4	step
13	7	10	7	10	13	48-55	Effect 5	step
						56-63	Effect 6	step
						64-71	Effect 7	step
						72-79	Effect 8	step
						80-87	Effect 9	step
						88-95	Effect 10	step
						96-103	Effect 11	step
						104-111	Effect 12	step
						112-119	Effect 13	step
						120-255	Reserved	step
-	-	-	-	-	14		**No function**	
-	-	-	-	-	15		**No function**	
							Shutter/Strobe	
						0-31	Shutter closed	step
						32-63	Strobe effect from slow--> fast (zone 2,3 only)	proportional
						64-95	Strobe effect from slow--> fast (All zones together)	proportional
							----------*Set value on LED zone effects*----------	
						96-111	Zone effects speed control, slow--> fast	proportional
						112-127	Zone effects speed control, fast--> slow /opposite direction/	proportional
							----------	
14	8	11	8	7	16	128-143	Opening pulses in sequences from slow--> fast (All zones together)	proportional
						144-159	Closing pulses in sequences from fast--> slow (All zones together)	proportional
						160-175	Random strobe effect from slow--> fast (random zone)	proportional
						176-191	Random strobe effect from slow--> fast (random zone + random strobe)	proportional
						192-223	Random strobe effect from slow --> fast (All zones together)	proportional
						224-255	Shutter open	step
15	9	12	9	8	17		**Dimmer (8 bit) - All LED zones**	
						0-255	Dimmer intensity from 0% to 100%	proportional
16	10	-	-	9	18		**Dimmer fine (16 bit) - All LED zones**	
						0-255	Fine dimming	proportional

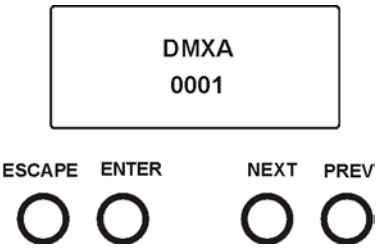
5.1 LED zone order



6. Control menu

The Robin 100 LEDBeam is equipped with 2-row LCD display which allows to set the fixture´s behaviour according to your needs, obtain information on its operation, test its various parts and lastly program it, if it has to be used in a stand-alone mode.

Control panel:
[ESCAPE] button used to leave the menu without saving changes.
[NEXT] , [PREV] buttons for moving between menu items and for value adjusting.



[ENTER] button used to enter the selected menu (menu item) and to confirm adjusted value.

After switching the fixture on, display shows current DMX address.

6.1 Addressing (DMXA)

Set DMXA- Use this menu item to set the DMX start address of the fixture, which is defined as the first channel from which the Robin 100 LEDBeam will respond to the controller.
If you set, for example, the address 36, the Robin 100 LEDBeam will use channels 36 - 51 for control (if Mode 1 is selected).
Please, be sure that you do not have any overlapping channels in order to control each Robin 100 LEDBeam correctly and independently from any other fixture on the DMX data link.
If there is no data received at the DMX input, the display will start to flash "0001" with actually stored DMX address.

6.2 Fixture information (Info)

Pon Time - **Power on time**. Select this menu to read the number of fixture operation hours.
Total - The item shows the total number of the operation hours since the Robin 100 LEDBeam has been fabricated.
Reset - The item shows the number of the operation hours that the Robin 100 LEDBeam has been powered on since the counter was last reset.
In order to reset this counter to 0, press and hold both [NEXT] and [PREV] buttons and the [Enter] button at the same time.

DMX In - DMX readout. The menu is used to read DMX values of each channel received by the fixture.

Temp - **Temperature**. The menu shows temperature in the LED module.
Current - A current temperature of the LED module.
Highest - A maximum temperature of the the LED module since the fixture has been fabricated.
High Res - A maximum temperature of the the LED module since the counter was last reset.
In order to reset this counter, press and hold both [NEXT] and [PREV] buttons and the [Enter] button at the same time.

Sw Ver - **Software versions**. Select this item to read the software version of the fixture modules.
IC-1 - A pan/Tilt processor on the main board in the fixture arm.
IC-2 - A display processor on the display board in the fixture base.
IC-3 - LED control processor on the board in the fixture head.

6.3 Personality (Pers)

DMX Pres - **DMX preset**. Use the menu to select desired channel mode.
- **Mode 1** - 16 control channels
- **Mode 2** - 10 control channels
- **Mode 3** - 12 control channels
- **Mode 4** - 9 control channels
- **Mode 5** - 16 control channels
- **Mode 6** - 18 control channels

Pan Rev - **Pan reverse**. The item allows to invert pan movement.
Tilt Rev - **Tilt reverse**. The item allows to invert tilt movement.

P/T Mode - **Pan and Tilt movement mode**. Use this menu to set mode of the pan/tilt movement.

Speed - Both Pan and tilt will move with the same speed as adjusted at the channel 5 "Pan/Tilt speed, Pan/Tilt time".

Time – The pan and tilt will move with different speeds and they will come at the same time to the end point of their tracks (pan and tilt use their optimal speeds). Time of the pan/tilt movement (25.5 sec. max.) is set by the channel "Pan/Tilt speed, Pan/Tilt time".

P/T Feed - **Pan and Tilt Feedback**. The menu item allows to return the mowing head to the required pan/tilt position after changing the position by an external force if this option is set on.
Note. The Pan/Tilt Feedback should be permanent On, the option Off is not suitable for standard operation and the head of the fixture can be damaged!

Tilt Red - **Tilt movement reduction**. Use this menu to set the range of the tilt movement of the fixture head

Off – Standard range: 0-300°.

On- Reduced range: 0-210°. This option must be set before top hat placing otherwise the top hat will ran into fixture´s yoke.

Display - **Display adjusting**. This menu allows you to adjust the display behaviour.

Turn - This function turns the display by 180°.

On/Off T - This function allows you to keep the display permanent on or turn it off two minutes after last pressing any button on the control panel.

Contrast- Use this function to adjust contrast of the display (0-100%).

Backlight- Use this function to adjust backlight of the display (0-100%).

BLC DMC - **Blackout during movement correction**. Set this option on if you wish to close light output during the time when the head goes to its correct position, which has been changed by an external force.

Act Blc - **Active blackout**. Use this menu if you wish to close the light output during effect changes.

P/T Mov - The menu item allows to close light output while the pan/tilt coordinates are changing.

Mic Sens - **Microfon sensitivity**. Enter the menu if you want to adjust the microphone sensitivity (1-max., 19-min.).

Fans - **Fan mode**. Use the menu to set the fixture fans to max. fan power mode ("**High**") or to auto- control mode ("**Auto**").

Temp Uni - **Temperature unit**. Use the menu item to change temperature unit from °C to °F.

I Ef Pos - **Init effect positions**. Use the menu to set all effects to the desired positions at which they will stay after switching the fixture on without DMX signal connected.
Defaults - The menu item allows to set all fixture parameters to the default (factory) values.

6.4 Manual Control (Manual)

Pres Eff - **Preset effects**. Use the menu to show preset positions of each channel effect.

Manual C - **Manual control**. Use the menu to control all fixture channels by means of the control panel.

6.5 Test program (Test Prg)

Use this menu to to run a special demo-test sequences without an external controller, which will show you some possibilities of using Robin 100 LEDBeam.

Static - **Static mode**. This mode is suitable for projections on the wall, ceiling or ground without any head movement.

Dynamic - **Dynamic mode.** This mode uses all Robin 100 LEDBeam functions including pan/tilt movement and therefore is good for a complete introduction of the fixture.

6.6 Stand-alone (St Alone)

Music T - **Music trigger**. Select this function to enable the sound control of the running program via the built-in microphone.

Auto Run - **Presetting playback**. This function allows you to select the program which will be played in the stand-alone mode after switching the fixture on. Selected program will be played continuously in a loop.

Off - The option disables „Auto Run" function.
Test - The option will start built-in test program.
Prog 1 - The option will start user-created program 1
Prog 2 - The option will start user-created program 2
Prog 3 - The option will start user-created program 3

Pr Play - **Playing program**. Select this menu to run a user-created program in a loop.

Test Prg - The option runs built-in test program.
Prog 1 - The option runs user-created program 1
Prog 2 - The option runs user-created program 2
Prog 3 - The option runs user-created program 3

Select the program you wish and press [ENTER]. The selected program starts running. By Pressing [ENTER] again, program pauses running.

Pr Edit - **Editing program**. Select this menu to edit or create the program. The Robin 100 LEDBeam has one built-in program and one user-editable program up to 40 steps. Each program step has a step time - during which effects last in the current step and a fade time- during which effects move to new positions.
To edit program:

Procedure:

1. Press [NEXT] or [PREV] to select the menu "Edit" and press [ENTER].
2. Press [NEXT] or [PREV] to select the desired program step and press [ENTER] button.
3. Press [NEXT] or [PREV] to select the desired item and press [ENTER] button. Now you can edit by [NEXT] or [PREV] buttons the DMX value (0-255) for selected item:

Prg End.	a total number of the program steps (value 1-40). This value you should be set before starting of programming (e.g. if you want to create program with the 10 steps, set Prg End=10).
PAn	a coarse pan movement
PAn F	a fine pan movement
Tilt	a coarse tilt movement
Tilt F	a fine tilt movement
P/T Sp	a pan/tilt speed
Power	power/special functions
Strob	a strobe/shutter
Dimmer	a dimmer coarse F.Tim a fade time (0-25.5 sec)
Dimm F	a dimmer fine
S.Tim	a step time (0-25.5 sec)
COPY	copying the current prog. step to

4. Press [ENTER] button to confirm adjusted value .
5. Press [ESCAPE] button, select next prog. step, press [ENTER] button and repeat steps 3 - 5).

6.7 Reset

This option enables the Robin 100 LEDBeam to index all effects and return to their standard positions.

6.8 Special functions (Special)

RDM Low - This menu item shows the first part of the RDM identification code.

RDM High - This menu item shows the second part of the RDM identification code.

Wireless - **Wireless DMX information**. The menu allows to read some information about Wireless DMX operation

Stat - **Wireless status**. Use the menu to read wireless DMX status.

Unlink - use this item to unlink fixture from wireless DMX.

Adjust - **Adjustment**. The menu allows the fine adjustment of effects.

DMX Val- **DMX values**. Use the menu to set DMX values of fixture´s channels.

Calib - A fine calibration of pan/tilt

Calibration of the pan/tilt via the control board

1. Disconnect DMX controller from the fixture and enter the "Calib" menu.
2. Use the [PREV] and [NEXT] to find "Pan" and press [ENTER].
3. Set desired value and save it by pressing [ENTER].
4. Repeat steps 2 and 3 for Tilt.
5. After calibrating both effects, find item "Store" and press [ENTER]. to save all adjusted values and reset the fixture.

Note: you can also use DMX controler for both calibrations stated above, calibration protocol is the following:

Effect	***Mode 1***	***Mode 2***	***Mode 3***	***Mode 4***	***Mode 5***
Pan-fine adjustment	channel 17	channel 11	channel 13	channel 10	channel 17
Tilt - fine adjustment	channel 18	channel 12	channel 14	channel 11	channel 18

Sw Upd - **Software update**. The menu item allows you to update software in the fixture via either serial or USB port of PC.

The following are required in order to update software:

- PC running Windows 95/98/2000/XP/7 or Linux
- DMX Software Uploader
- Flash cable RS232/DMX No.13050624 (if you want to use a serial port of PC)
- Robe Universal Interface (if you want to use an USB port of PC)

Note 1: Software update should execute a qualified person. If you lack qualification, do not attempt the update yourself and ask for help your ROBE distributor.

Note 2: DMX address, , programs 1-3 and all items in the menu "Pers" will be set to their default (factory) values.

To update software in the fixture:

I. Installation of the DMX Software Uploader.

1. DMX Software Uploader program is available from the ROBE web site at WWW.robe.cz.
2. Make a new directory (e.g. Robe_Uploader) on your hard disk and download the software to it.
3. Unpack the program to the directory.

II.Fixture software updating.

1.Determine which of your ports is available on your PC and connect it:
- with the DMX input of the fixture if you using the flash cable RS232/DMX
- with the DMX output of the Robe Universal Interface if you using the USB cable.

Disconnect the fixture from the other fixtures in a DMX chain. Turn both the computer and the fixture on. Make sure the lamp is switched off (only if the fixture involves a lamp).

2. Switch the fixture to the updating mode by selecting the "SW Upd " item and press [ENTER].

Note: If you do not want to continue in software update, you have to switch off and on the fixture to escape from this menu.

We recommend to cancel all running programs before starting the Software Uploader.

3. Run the Software Uploader program. Select desired COM and then click on the Connect button. (Select COM if the serial port is used or Robe Universal Interface if the USB port is used).

If the connection is OK, click on the “Start Uploading button“ to start uploading. It will take several minutes to perform software update.

If the option "Incremental Update" is not checked, all processors will be updated (including processors with the same software version).

If you wish to update only later versions of processors, check the “Incremental Update box“.

Avoid interrupting the process. Update status is being displayed in the Info Box window.

When the update is finished, the line with the text “The fixture is successfully updated“ will appear in this window and the fixture will reset with the new software.

Note: In the case of an interruption of the upload process (e.g. power cut), the fixture keeps the updating mode and you have to repeat the software update again.

7. RDM

This fixture supports RDM operation. RDM (Remote Device Management) is a bi-directional communications protocol for use in DMX512 control systems, it is the new open standard for DMX512 device configuration and status monitoring.
The RDM protocol allows data packets to be inserted into a DMX512 data stream without adversely affecting existing non-RDM equipment. By using a special „Start Code," and by complying with the timing specifications for DMX512, the RDM protocol allows a console or dedicated RDM controller to send commands to and receive messages from specific moving lights.
RDM allows explicit commands to be sent to a device and responses to be received from it.
The list of commands for Robin 100 LEDBeam is the following.

Parameter ID	Discovery command	SET command	GET command
DISC_UNIQUE_BRANCH	*		
DISC_MUTE	*		
DISC_UN_MUTE	*		
DEVICE_INFO			*
SUPPORTED_PARAMETERS			*
SOFTWARE_VERSION_LABEL			*
DMX_START_ADDRESS		*	*
IDENTIFY_DEVICE		*	*
DEVICE_MODEL_DESCRIPTION			*
MANUFACTURER_LABEL			*
DEVICE_LABEL		*	*
SENSOR_DEFINITION			*
SENSOR_VALUE			*
DISPLAY_INVERT		*	*
DISPLAY_LEVEL		*	*
PAN_INVERT		*	*
TILT_INVERT		*	*
DEVICE_RESET		*	
DMX_PERSONALITY		*	*
DMX_PERSONALITY_DESCRIPTION			*
STATUS_MESSAGES			*
STATUS_ID_DESCRIPTION			*
DEVICE_HOURS			*
PARAMETER_DESCRIPTION			*
ROBE_DMX_INPUT		*	*
ROBE_WIRELESS_UNLINK		*	

8. Error and information messages

Short Err

The message informs you that short circuit has occured on the LED PCB.

Tilt Err

This message will appear after the reset of the fixture if the head´s magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or the stepping motor is defective or its driving IC on the PCB. The head is not located in the default position after the reset.

Pan Err
This message will appear after the reset of the fixture if the head´s magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or the stepping motor is defective or its driving IC on the PCB. The head is not located in the default position after the reset.

9. Technical Specifications

Electrical

Power supply:.....electronic auto-ranging
Input voltage range:..... supply 100-240V, 50-60Hz
Fuse:.....T 3.15A/250V ~

Power consumption *:.....200W@230V,I=0.89A, power factor=0.96 (WW+CW=full)

200W@208V,I=0.99A, power factor=0.96 (WW+CW=full)

200W@110V,I=1.9A, power factor=0.94 (WW+CW=full)

*Allow for a deviation of +/-10%

Optic

Light source: 12 Osram Ostar DL multichips
3 zones with individual colour control of each
Min LED life expectancy: 20.000 hours
Beam angle: 7°

LED zones

pre-defined zone effects
Zone effects in both directions with variable speed

Strobe

All LED zones together:
- Strobe effect with variable speed (0.3 - 20Hz)
- Random strobe pulse-effect with variable speed
- Opening/closing pulse effect with variable speed

Independent strobe effect with variable speed (0.3 - 20Hz) at zone 2,3
Random strobe and random LED zone effect

Dimmer

Smooth dimmer from 0 - 100 %

Pan/Tilt

Max. pan movement range: 450°
Max. tilt movement range: 300° (280° reduced)
16 bit movement resolution
Automatic Pan/Tilt position correction
Remotely controllable speed of pan/tilt movement for easy programming
Movement control: tracking and vector
Pan movement 0° - 450° at max. speed: 1 sec.
Tilt movement 0° - 300° at max. speed: 0.5 sec.

Control

2-row LCD display & 4 buttons
Readout fixture usage, receiving DMX values, temperatures, etc
Built-in analyzer for easy fault finding, error messages
Built-in demo sequences
Silent fans cooling,
Stand-alone operation
3 user editable programs, each up to 40 steps
Supported protocols: USITT DMX 512, RDM,

Support of RDM (Remote Device Management)
6 DMX modes (16, 10, 12, 9, 16, 18 control channels)

External Wireless DMX/RDM module (option)

Compliance with USITT DMX-512 (1986 & 1990) and 512-A
Full DMX fidelity and frame integrity
Auto sensing of DMX frame rate and frame size
<5ms DMX latency
Operational frequency range of 2402-2480 MHz
Producer: LumenRadio

Connection

DMX data in/out: Locking 5-pin XLR
AC power input: Chassis connector Neutrik PowerCon, A-type, NAC3MPA
AC power output: Chassis connector Neutrik PowerCon, B-type, NAC3MPB

Rigging

Mounting points: pair of 1/4-turn locks
Mounting horizontally or vertically via Omega holder

Temperatures

Maximum ambient temperature : 45° C
Maximum housing temperature : 80° C

Distances

Min. distance from flammable surfaces: 0.4 m
Min. distance to lighted object: 0.8 m

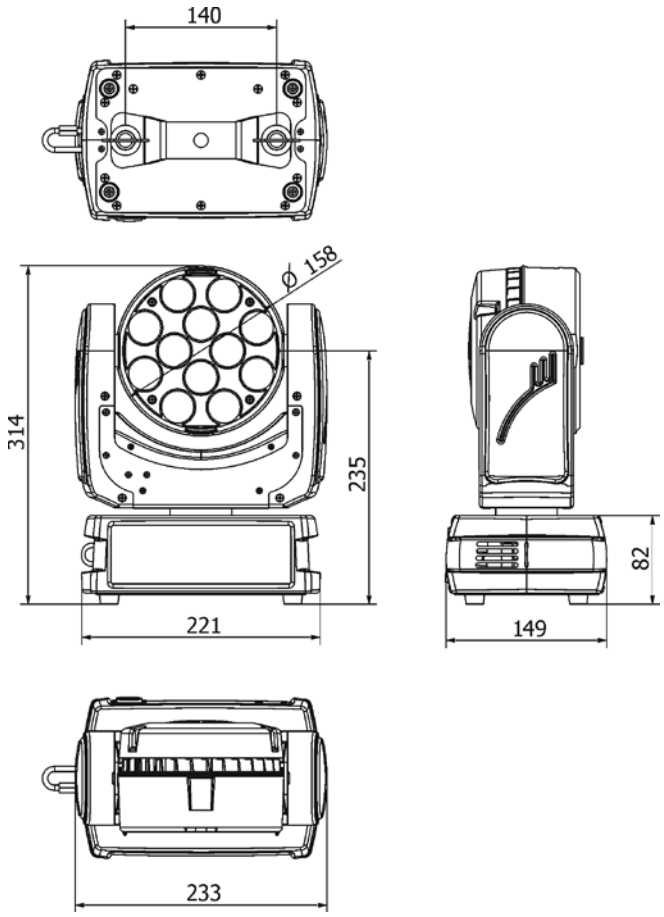
Total heat dissipation

680 BTU/h (calculated)

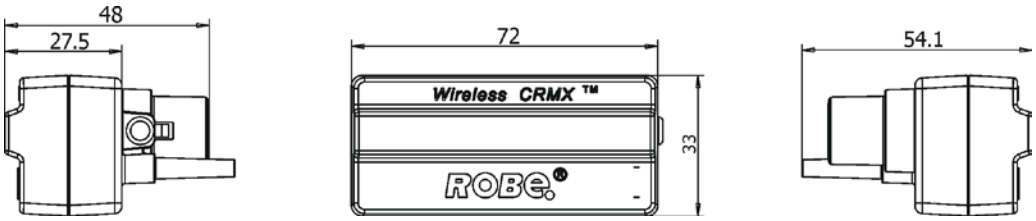
Weight (net):

4.5 kg

Dimensions (mm)



Wireles DMX module: Robe Wireless CRMX-LB100



Accessories

Omega holder (P/N 99010420).....1 piece

Optional accessories

(P/N 1098 0118) Top hat (black)
(P/N 1098 0123) Diffusion filter 40°
(P/N 1098 0122) Diffusion filter 25°
(P/N 1098 0194) Diffusion filter 10°

(P/N 10980127) Robe Wireless CRMX-LB100

(P/N1305 1731) Mains Cable PowerCon In/open ended, 2m
(P/N 1305 1724) Mains Cable PowerCon In/Schuko, 2m
(P/N 1305 1725) Mains Cable PowerCon In/CEE 16A, 2m
(P/N 1305 1726) Mains Cable PowerCon In/US, 2m
(P/N 1305 1727) Daisy Chain PowerCon In/Out, EU, 2m
(P/N 1305 1728) Daisy Chain PowerCon In/Out, US, 2m

10. Maintenance and cleaning

DANGER !
Disconnect from the mains before starting any maintenance work

A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

Never use alcohol or solvents for cleaning lenses in the moving head!
Use wet cloth only.

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on or within the fixture. Otherwise, the fixture‘s light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably throughout its life.
A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

Lenses may require monthly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling fans should be cleaned according to the situation (at least annually).
The interior of the base should be cleaned at least annually using a vacuum-cleaner or an air-jet.

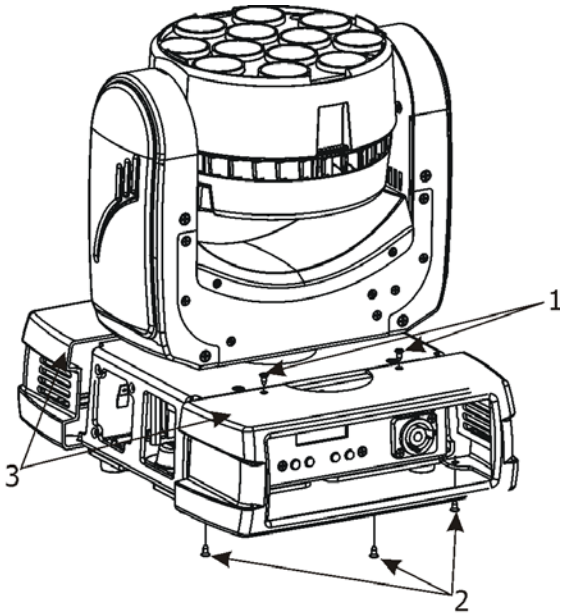
More complicated maintenance and service operations are only to be carried out by authorized distributors.

10.1 Replacing fuse

1.Replace the fuse by a fuse of the same type and rating only.

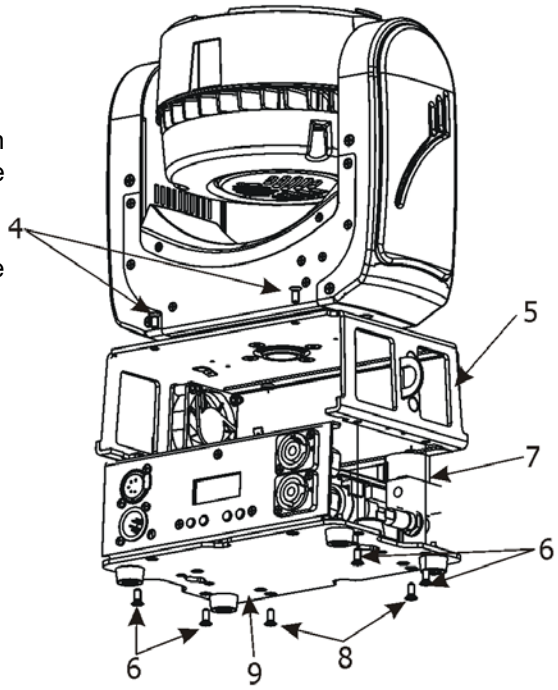
Before replacing the fuse, unplug mains lead!

2. Remove the plastic covers of the base (3) by unscrewing 5 fastening screws (1) and (2) on each cover.

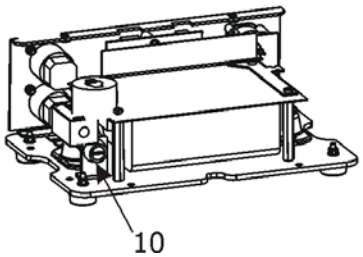


3. Unscrew four screws (4) on the top chassis (5). Lay down the fixture and unscrew four screws (6) on the bottom plate (9) to push out inside module of the base.

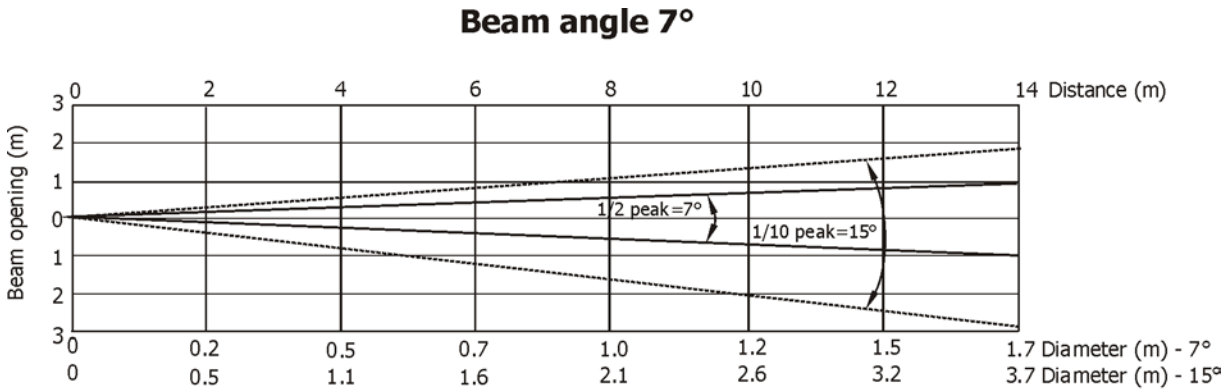
4. Unscrew two screws (8) on the bottom plate to remove rear panel of the fixture (7).



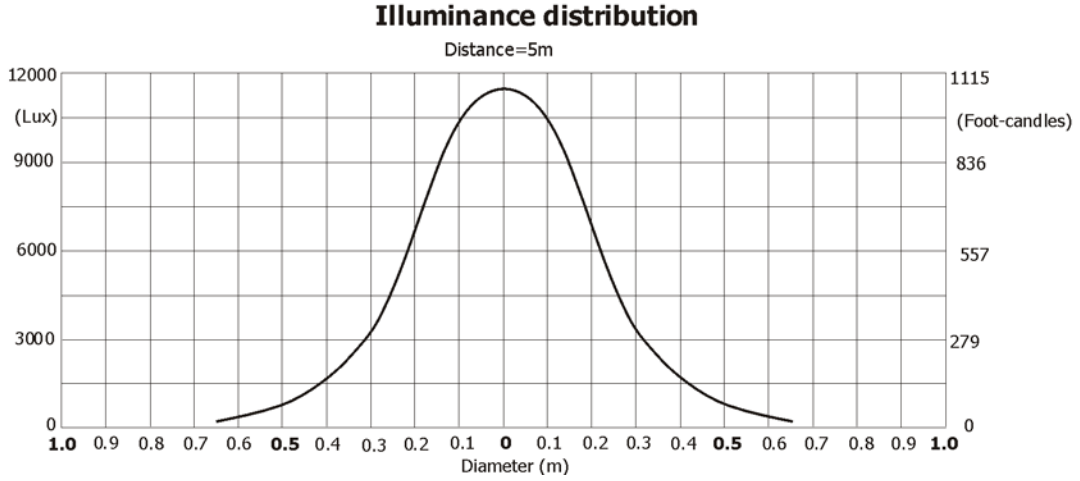
5. Now you have access for the fuse holder (10) in the inside module of the base.
6. Remove the old fuse from the fuseholder.
7. Install the new fuse into the fuseholder.
8. Assemble the base of the fixture.



11. Photometric diagrams



Distance (m)	2	4	5	6	8	10	12	14	
DL (6500K)	72625/6747	18156/1687	11620/1080	8069/750	4539/422	2905/270	2017/187	1482/138	Intensity (center) Lux/Footcandles



12. ChangeLog

This section summarizes all types of changes in the user manual.

Version of the manual	Date of issue	Description of changes
1.1	3/12/2012	Added chapter 3.6 Wireless DMX operation
1.2	17/1/2013	Added photometric diagram
1.3	27/01/2014	Change in the chapter "Installing diffusion filter"

Specifications are subject to change without notice.
January 27, 2014